

WHAT IS CLAIMED IS:

1. A method of inhibiting activation of CTL and NK cells, said method comprising:

combining said cells with an activation inhibiting
5 amount of a compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B α_1 domain or species analog thereof, wherein amino acids 84 to 86 are YYW;

whereby activation of said cells is inhibited.

10 2. A method according to Claim 1, wherein said oligopeptide is of at least 8 amino acids and amino acids 83 to 86 are RYYW.

3. A method according to Claim 2 wherein said oligopeptide comprises at least a total of 6 contiguous amino acids from
15 said HLA-B α_1 domain joined to said tetrad.

4. A method according to Claim 1, wherein said compound is a dimer of said oligopeptide.

5. A method according to Claim 1, wherein at least one of said amino acids is a D-stereoisomer.

20 6. A method according to Claim 1, wherein said combining is in the presence of a viable solid organ or viable second cells other than CTL and NK cells.

7. A method of inhibiting activation of CTL and NK cells, said method comprising:

25 combining said cells with an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids, including the triad YYW and comprising a contiguous sequence of the sequence:

30 aa⁷⁰ aa⁷¹ Q aa⁷³ aa⁷⁴ R aa⁷⁶ aa⁷⁷ L aa⁷⁹ aa⁸⁰ aa⁸¹ aa⁸² aa⁸³ Y Y W aa⁸⁷
aa⁸⁸ aa⁸⁹ aa⁹⁰ aa⁹¹.

wherein:

aa⁷⁰ is Q, H, S, N or K;

aa⁷¹ is an aliphatic neutral amino acid;

aa⁷³ is T or A;

5 aa⁷⁴ is Y or H;

aa⁷⁶ is aliphatic neutral amino acid;

aa⁷⁷ is S or N;

aa⁷⁹ is R or G;

aa⁸⁰ is T, I, N or an aromatic amino acid;

10 aa⁸¹ is an aliphatic non-polar amino acid;

aa⁸² is R, L or an aromatic amino acid;

aa⁸³ is G or R;

aa⁸⁷ is any amino acid;

15 aa⁸⁸ is an aromatic amino acid or aliphatic amino acid of from 5 to 6 carbon atoms;

aa⁸⁹ is any amino acid;

aa⁹⁰ is any amino acid; and

aa⁹¹ is any amino acid;

whereby activation of said cells is inhibited.

20 8. A method according to Claim 7, wherein said oligopeptide is of at least 8 amino acids, is the dimer thereof, or at least one of the amino acids is the D-stereoisomer and is of the formula:

R V/E N/D L R I A/L L R/E Y Y W Q/D S

25 wherein the backslashes intend that either amino acid may be present at that position.

9. A method according to Claim 7, wherein said combining is in the presence of a viable solid organ or cells other than CTL or NK cells.

30 10. In a method for transplanting a donor mammalian organ or cells other than as part of a viable organ to a mammalian recipient, which method comprises:

isolating said donor organ or cells from said donor and implanting said donor organ or cells in said recipient, the improvement which comprises at least one of the following steps:

5 (a) combining said organ or cells prior to implanting in said mammalian recipient with an activation inhibiting amount of a compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B α_1 domain or species analog thereof, wherein
10 amino acids 84 to 86 are YYW; or

(b) administering to said mammalian recipient in a period extending from prior to subsequent to implanting said donor organ or cells an activation inhibiting amount of a compound comprising an oligopeptide of at least 6
15 amino acids comprising a contiguous sequence of the HLA-B α_1 domain or species analog thereof, wherein amino acids 84 to 86 are YYW.

11. A method according to Claim 10, wherein said compound is of the formula:

20 R V/E N/D L R I A/L L R/E Y Y W Q/D S

wherein the backslashes intend that either amino acid may be present at that position.

12. A method according to Claim 11, wherein said compound is a peptide of not more than 20 amino acids and comprises
25 the amino acid sequence N L R I A L R Y Y W.

13. A compound comprising an oligopeptide of at least 6 amino acids comprising a contiguous sequence of the HLA-B α_1 domain or species analog thereof, wherein amino acids 84 to 86 are YYW.

30 14. A compound comprising an oligopeptide of at least 8 amino acids comprising the triad YYW and comprising a contiguous sequence of the sequence:

aa⁷⁰ aa⁷¹ Q T aa⁷⁴ R aa⁷⁶ aa⁷⁷ L aa⁷⁹ aa⁸⁰ aa⁸¹ aa⁸² aa⁸³ Y Y W aa⁸⁷
aa⁸⁸ aa⁸⁹ aa⁹⁰ aa⁹¹.

wherein:

- 5 aa⁷⁰ is Q, H, S, N or K;
 aa⁷¹ is an aliphatic neutral amino acid;
 aa⁷⁴ is D, Y or H;
 aa⁷⁶ is E or V;
 aa⁷⁷ is D, S or N;
 aa⁷⁹ is R or G;
10 aa⁸⁰ is T, I, N or an aromatic amino acid;
 aa⁸¹ is an aliphatic non-polar amino acid;
 aa⁸² is R, L or an aromatic amino acid;
 aa⁸³ is G or R;
 aa⁸⁷ is any amino acid;
15 aa⁸⁸ is an aromatic amino acid or aliphatic amino
acid of from 5 to 6 carbon atoms;
 aa⁸⁹ is is any amino acid;
 aa⁹⁰ is any amino acid; and
 aa⁹¹ is any amino acid;
20 the dimer or at least one amino acid being the D-
stereoisomer.

15. A compound according to Claim 14, wherein said
compound is of the formula:

R V/E N/D L R I A/L L R/E Y Y W Q/D S

- 25 wherein the backslashes intend that either amino acid
may be present at that position.

16. A compound according to Claim 15 of at least 10 amino
acids including the sequence N L R I A L R Y Y W.

17. A compound comprising at least two oligopeptides
30 according to Claim 14 joined at their C terminus to a
polylysine.